

AMENDMENTS TO THE CLAIMS

Please amend the specification as set forth below.

Claims 1-5 are (CANCELED).

6. (CURRENTLY AMENDED) A polishing apparatus for polishing a work surface having protrusions and depressions thereon with slurry containing particles, comprising:

- a moving stage on which the work surface is mounted;
- a processing circuit that generates coordinate values of the work surface by associating work surface measurements with coordinates of the moving stage;
- an operational control unit that stores the generated coordinate values;
- a stage control circuit that adjusts the position of the moving stage based on the coordinate values stored in the operational control unit;
- a laser optical system for projecting and irradiating that scans the work surface by selectively projecting and irradiating laser light onto the work surface; and
- a polishing tool system for performing that applies pressure to the work surface in an axis-axial direction and provides rotational movement,

wherein ~~said irradiation of laser light and polishing are performed on said depressions adjacent to said protrusions on said work surface simultaneously and sequentially by relative movement of said laser optical system and said polishing tool system to said work surface~~ the stage control circuit adjusts the position of the moving stage as the laser optical system scans laser light onto the depressions of the work surface, so that the polishing particles of the slurry are aggregated in the depressions.

7. (ORIGINAL) The polishing apparatus according to claim 6, wherein:

the shape of said surface of said region to be polished on said work surface is measured by shape measuring means before or during polishing; the measured shape is stored by storing means; a laser light irradiation region, an irradiation condition, and a polishing condition are calculated from the stored measurement data; and based on the calculation result, said laser optical system irradiates laser to said depressions adjacent to said protrusions or said polishing tool system polishes said protrusions and said depressions.

8. (ORIGINAL) The polishing apparatus according to claim 6, wherein a light shield mask is placed in an optical path of said laser optical system in order to irradiate laser light selectively in accordance with the shape of said protrusions and said depressions of said work surface.